

**IN THE CLAIMS**

For the convenience of the Examiner, all pending claims of the present Application are shown below whether or not an amendment has been made.

Please amend the claims as follows.

1. **(Currently amended)** A method of maintaining a state of a virtual connection supported by an active connection manager on a standby connection manager comprising:

configuring the standby connection manager to include a physical machine object that stores a physical IP address of a physical machine that is available to the active connection manager and a virtual machine object that stores a virtual IP address of a virtual machine that is implemented on the active connection manager;

receiving a replication packet at the standby connection manager from the active connection manager wherein the replication packet includes a foreign IP address, the virtual IP address and the physical IP address; ~~and~~

storing a standby connection object in the standby connection manager that includes the foreign IP address, the virtual IP address and the physical IP address from the replication packet; and

updating a virtual machine counter in the virtual machine object when a replication packet is received that includes the virtual IP address.

2. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 further including changing the standby connection manager to an active state and translating a destination IP address of incoming packets that have a packet source address that matches the foreign IP address and a packet destination address that matches the virtual IP address into the physical IP address.

3. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 further including:

updating a physical machine counter in the physical machine object when a replication packet is received that includes the physical IP address.

4. **(Canceled)**

5. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 further including:

receiving a replication packet at the standby connection manager from the active connection manager wherein the replication packet includes the foreign IP address, the virtual IP address, and a flag indicating that the replication packet corresponds to a deleted connection; and

deleting the standby connection object that includes the foreign IP address and the virtual IP address.

6. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1, wherein the virtual connection comprises a first virtual connection, and wherein the replication packet includes a second foreign IP address, a second virtual IP address and a second physical IP address wherein the second foreign IP address, the second virtual IP address and the second physical IP address correspond to a second virtual connection that is associated with the first virtual connection.

7. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 6 wherein the second virtual connection is not timed out unless the first virtual connection is timed out.

8. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 6 wherein the first virtual connection is an FTP control connection and the second virtual connection is an FTP data connection.

9. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 further including changing the standby connection manager to an active state and updating a time stamp in a physical machine object to reflect a current time before timing out the physical machine object.

10. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 further including changing the standby connection manager to an active state and updating a time stamp in a virtual machine object to reflect the current time before timing out the virtual machine object.

11. **(Currently amended)** The method of maintaining the state of a virtual connection recited in claim 1 further comprising distributing new connections wherein ~~the physical machine wherein new connections are distributed~~ to the physical machine ~~using a load balancing scheme that depends~~ based, at least in part, on a number of existing connections ~~made~~ to the physical machine.

12. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 further including receiving configuration information for configuring the standby connection manager on a configuration connection.

13. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 12 wherein the configuration connection is a dedicated configuration connection between the active connection manager and the standby connection manager.

14. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 wherein the standby connection object also includes a virtual machine port number.

15. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 wherein the standby connection object also includes a physical machine port number.

16. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 wherein the standby connection object also includes a foreign port number.

17. **(Previously presented)** The method of maintaining the state of a virtual connection recited in claim 1 further including checking the size of the replication packet.

18. **(Canceled)**

19. **(Cancelled)**

20. **(Cancelled)**

21. (New) A method of maintaining a state of a virtual connection supported by an active connection manager on a standby connection manager, comprising:

configuring the standby connection manager to include a physical machine object that stores a first physical IP address of a physical machine that is available to the active connection manager and a virtual machine object that stores a first virtual IP address of a virtual machine associated with a first virtual connection that is implemented on the active connection manager;

receiving a replication packet at the standby connection manager from the active connection manager wherein the replication packet includes a first foreign IP address, the first virtual IP address, the first physical IP address, a second foreign IP address, a second virtual IP address, and a second physical IP address, wherein the second foreign IP address, the second virtual IP address, and the second physical IP address correspond to a second virtual connection that is associated with the first virtual connection; and

storing a standby connection object in the standby connection manager that includes the first foreign IP address, the first virtual IP address and the first physical IP address from the replication packet.

22. (New) The method of maintaining the state of a virtual connection recited in claim 21, wherein the second virtual connection is not timed out unless the first virtual connection is timed out.

23. (New) The method of maintaining the state of a virtual connection recited in claim 21, wherein the first virtual connection comprises an FTP control connection and the second virtual connection comprises an FTP data connection.

24. (New) The method of maintaining the state of a virtual connection recited in claim 21, further comprising changing the standby connection manager to an active state and updating a time stamp in a physical machine object to reflect a current time before timing out the physical machine object.

25. (New) The method of maintaining the state of a virtual connection recited in claim 21, further comprising changing the standby connection manager to an active state and updating a time stamp in a virtual machine object to reflect a current time before timing out the virtual machine object.

26. (New) The method of maintaining the state of a virtual connection recited in claim 21, further comprising distributing new connections to the physical machine based on a number of existing connections to the physical machine.

27. **(New)** A method of maintaining a state of a virtual connection supported by an active connection manager on a standby connection manager, comprising:

configuring the standby connection manager to include a physical machine object that stores a physical IP address of a physical machine that is available to the active connection manager and a virtual machine object that stores a virtual IP address of a virtual machine that is implemented on the active connection manager;

receiving a replication packet at the standby connection manager from the active connection manager wherein the replication packet includes a foreign IP address, the virtual IP address and the physical IP address;

storing a standby connection object in the standby connection manager that includes the foreign IP address, the virtual IP address and the physical IP address from the replication packet; and

distributing new connections to the physical machine based on a number of existing connections to the physical machine.

28. **(New)** The method of maintaining the state of a virtual connection recited in claim 27, wherein the second virtual connection is not timed out unless the first virtual connection is timed out.

29. **(New)** The method of maintaining the state of a virtual connection recited in claim 27, wherein the first virtual connection comprises an FTP control connection and the second virtual connection comprises an FTP data connection.

30. **(New)** The method of maintaining the state of a virtual connection recited in claim 27, further comprising changing the standby connection manager to an active state and updating a time stamp in a physical machine object to reflect a current time before timing out the physical machine object.



31. (New) The method of maintaining the state of a virtual connection recited in claim 27, further comprising changing the standby connection manager to an active state and updating a time stamp in a virtual machine object to reflect a current time before timing out the virtual machine object.